

USSN 09/700,901

Docket No. 158-P-C1553US

Amendments to the Claims

A detailed list of all claims under examination is shown below. Please amend claims 1, 4, 7 and 8 as shown in marked form:

1. (Currently amended) Two-component water paint system comprising an isocyanate as the first component and an aqueous emulsion of a hydroxy-functional alkyd resin as the second component, wherein the alkyd resin can be obtained from an oleic or fatty acid component, a polyvalent alcohol, a polyether polyol having a molecular weight of 400 to 8,000, a monobasic carboxylic acid and a polycarboxylic acid or the anhydride thereof, and wherein [[the first component contains a sufficient number of isocyanate groups and the second component contains a sufficient number of hydroxyl groups so that a mixture of]] the first component and second component [[has a processing time from 10 minutes to 6 hours at room temperature]] are formulated to provide a paint containing at least a stoichiometric ratio of isocyanate groups to hydroxyl groups with no more than 30% of the hydroxyl groups being pre-reacted with isocyanates.
2. (Original) Two-component water paint system according to claim 1, wherein the hydroxy-functional alkyd resin has a hydroxyl content of 1 to 8 wt.-%.
3. (Original) Two-component water paint system according to claim 1 or 2, wherein the hydroxy-functional alkyd resin is additionally modified by reaction with isocyanate.
4. (Currently amended) Process for the preparation of a [[two-component]] water paint system, comprising the steps of:
 - [[1]] A) providing an isocyanate as a first component, and
 - [[2]] B) preparing an aqueous emulsion of a hydroxy-functional alkyd resin comprising:
 - [[a]] i) reacting an oleic or fatty acid, a polyvalent alcohol, a polyether polyol having a molecular weight of 400 to 8,000, a monobasic carboxylic acid and a polycarboxylic acid or the anhydride thereof to obtain a hydroxy-functional alkyd resin,
 - [[b]] ii) neutralizing the hydroxy-functional alkyd resin with ammonia or amine, [[and]]

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- [[c]] iii) emulsifying the hydroxy-functional alkyd resin in water to provide a second component and
- iv) mixing [[wherein the first component contains a sufficient number of isocyanate groups and the second component contains a sufficient number of hydroxyl groups so that a mixture of]] the first component and second component [[has a processing time from 10 minutes to 6 hours at room temperature]] to provide a paint containing at least a stoichiometric ratio of isocyanate groups to hydroxyl groups with no more than 30% of the hydroxyl groups being pre-reacted with isocyanates.
5. (Original) Process according to claim 4, wherein the hydroxy-functional alkyd resin has a hydroxyl content of 1 to 8 wt. %.
6. (Original) Process according to claim 4, wherein the alkyd resin is additionally reacted with isocyanate.
7. (Currently amended) Process for painting a substrate using a paint system prepared according to claim 4, further comprising the [[steps of mixing]] step of applying the mixture of the first and second components [[shortly before painting and applying the resulting mixture]] to the substrate.
8. (Currently amended) Process according to claim 7, wherein the [[paint]] mixture is applied in a film having a thickness of at least 120 μm .
9. (Original) A painted article comprising a substrate coated with an essentially bubble-free film comprising a cured paint system according to claim 1.
10. (Original) A painted article according to claim 9, wherein the film has a thickness of at least 120 μm .

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Please add the following new claims 11 – 20:

11. (New) Two-component water paint system according to claim 1, wherein the first component and second component are formulated to provide a paint whose initial isocyanate amount is greater than or equal to a:

$$\text{basic isocyanate value} = \frac{42 \times 100 \times \text{hydroxyl \% in the second component}}{17 \times \text{isocyanate \% in the first component.}}$$

12. (New) Two-component water paint system according to claim 1 wherein the first component contains sufficient isocyanate to react with water to form polyureas and to cross-link with the second component.

13. (New) Two-component water paint system according to claim 1 wherein the isocyanate comprises a diisocyanate, triisocyanate or other polyisocyanate.

14. (New) Two-component water paint system according to claim 1 wherein the isocyanate comprises a pre-adduct, isocyanurate, uretdione or allophane based on hexamethylene diisocyanate, isophorone diisocyanate or toluene diisocyanate.

15. (New) Two-component water paint system according to claim 1 wherein the isocyanate comprises an oligomeric polyisocyanate.

16. (New) Two-component water paint system according to claim 1 wherein the isocyanate comprises hexamethylene diisocyanate or isophorone diisocyanate.

17. (New) Process according to claim 4 comprising mixing the first component and second component to provide a paint whose initial isocyanate amount is greater than or equal to a:

$$\text{basic isocyanate value} = \frac{42 \times 100 \times \text{hydroxyl \% in the second component}}{17 \times \text{isocyanate \% in the first component.}}$$

18. (New) Process according to claim 4 wherein the first component contains sufficient isocyanate to react with water to form polyureas and to cross-link with the second component.

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19. (New) Process according to claim 4 wherein the isocyanate comprises an oligomeric polyisocyanate.

20. (New) Process according to claim 4 wherein the isocyanate comprises hexamethylene diisocyanate or isophorone diisocyanate.